Toft Hill Primary School: Computing Long Term Plan

Year	Online Safety and Digital Literacy	Information Technology	Computer Science
1	<u>What should you do if you are unsure about something you see online?</u> • Knowing who to report to when encountering information that they are unsure about **NC: Identify where to go for help and support when they have concerns about content or contact**	<u>How can text be created on a device?</u> • Creating a simple document using suitable software **NC: Using technology to create, organise and store digital content** <u>How can photos and videos be taken?</u> • Using apps to take and view photos and videos **NC: Use technology to create digital content**	<u>How can a robot be programmed to follow instructions?</u> • Inputting instructions on beebots/software to follow a sequence of instructions NC: **Understand what algorithms are and how they are implemented on a device** <u>How can you predict what a program will do?</u> • Making simple predictions about an algorithm and debug to make improvements **NC:** Use logical reasoning to predict behaviour of simple programs
2	<u>How can devices be used to enable communication?</u> • Discovering ways people use technology to communicate and why it is important to be considerate to others **NC: Keeping personal information private and use technology safely and respectfully** <u>Who should you tell if you are worried or upset?</u> • Identifying trusted adults to inform if they are worried or upset about anything on a device. **NC: Identify where to go for help and support when they have concerns**	<u>How can pictures be created and changed?</u> • Using software to create/edit a picture **NC: Use technology to create and manipulate digital content** <u>How can text and graphics be combined?</u> • Creating an electronic poster **NC: Use technology purposefully to create, store and retrieve digital content**	<u>How can instructions be sequenced?</u> • Sequencing and debugging instructions to complete a route **NC: Programs execute following precise instructions and debug simple programs** <u>How are simple programs created?</u> • Using block programming to create a simple program **NC: Understand what algorithms are and create simple programs**

3	<u>Who can you trust online?</u> • Identifying ways to stay safe online and reporting concerns to adults **NC: Identify ways to report concerns online and use technology safely** <u>How can you protect your identity online?</u> • Identifying sensible decisions about ways to interact with others and how presenting yourself online carries risks **NC: Recognise acceptable and unacceptable behaviour. Use technology safely, respectfully and responsibly**	<u>How can posters be made using software?</u> • Creating a simple poster using text, pictures and graphics **NC: Use software to present information** <u>How are slides used to create a presentation?</u> • Creating a short presentation using sequences slides **NC: Use software to create and store digital content and present information**	<u>How are block programs used to code?</u> • Making a simple program that uses timing and sequence **NC: Use logical reasoning to explain how some algorithms work. To write and debug programs** **<u>How are conditionals used in programs?</u>** • Creating a program where different buttons provide unique responses **NC: Use selection in programs**
4	<u>How can information online end up with strangers?</u> • Identifying ways to stay safe online, protect personal information and knowing what to do when exposed to unpleasant materials **NC: Use technology safely and responsibly. Identify ways to report concerns** <u>How can search engines be used to find information?</u> • Entering key words to find information and ways to select useful results **NC: Use search technologies effectively**	<u>How can information be presented to others?</u> • Delivering a presentation using sequencing **NC: Use software to present information** <u>How can digital work be formatted?</u> • Modifying the fonts, style and background of digitally written work **NC: Select and use software to evaluate and present information**	<u>How can programmers use sequences?</u> • Sequencing instructions in a program to achieve a goal **NC: Explain how simple algorithms work and detect errors in programs** <u>How to create a program with repetition?</u> • Creating shapes using repeated instructions and simple loops NC: **Design and write programs that achieve specific goals**

5	<u>How can we trust information online?</u> • Comparing different websites and identifying that some sites may show bias **NC: Be discerning in evaluating digital content** <u>What are the risks associated with social media?</u> • Identifying how to report concerns and how to act responsibly with personal information **NC: Recognise acceptable/unacceptable behaviour. Identify ways to report concerns**	<u>How is software used to create an effective leaflet?</u> • Using multiple software to create an informative leaflet **NC: Use and combine a variety of software to present information** <u>How can software be used to analyse data?</u> • Inputting and manipulating data in spreadsheets **NC: Use software to collect, analyse and evaluate data** <u>How can software be used to create an effective presentation?</u> • Preparing an effective presentation for others that includes timing and sequences **NC: Use and combine a variety of software to collect content and present information**	<u>How can a program be customised?</u> • Changing the effects of a program by creating new backgrounds or characters and altering the level of difficulty in a game. **NC: Design programs that accomplish specific goals.** <u>How do programmers use loops to achieve goals?</u> • Creating a game that uses variables, conditional statements and loops **NC: Write and debug programs. Use sequence selection and repetition within programs. Solve problems by decomposing them into smaller parts**
6	<u>What are the risks associated with social media?</u> • Identifying how to manage privacy settings and the risks associated with social media **NC: Use technology safely and responsibly. Identify ways to report concerns** <u>How can you validate information?</u> • Assessing whether information is accurate and understanding the concept of fake news **NC: Use search technologies effectively, appreciate how results are selected and be discerning in evaluating digital content**	<u>How can digital images be modified?</u> • Add layers, filters and text to alter content **NC: Select and use a variety of software that accomplishes a given goal** <u>How can formula be used to complete tasks?</u> • Creating spreadsheets with formula to calculate values **NC: Use software to collect, analyse and evaluate data**	<u>How are mathematical expressions when creating conditional statements?</u> • Creating programs that rigger conditions when a statement has been completed a set number of times **NC: Work with variables and debug programs that accomplish specific goals** <u>How are conditional statements used to program objects?</u> • Completing programs that require if and when statements **NC: Use sequence, selection and repetition in programs**